



# The Conservation Strip

CONSERVING NATURAL RESOURCES FOR A BETTER ENVIRONMENT

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## Green Lawns for a Green Environment?

The typical suburban lawn has come under fire in recent years as a major source of non-point source pollution. Poorly maintained lawns can contribute nutrients, sediment, and pesticide residues to local ponds, streams, and eventually, the Chesapeake Bay. While some homeowners and environmental groups are promoting alternatives to traditional lawns, there is still a huge segment of the population that wants their grass, and they want it green.

A healthy lawn that is well maintained can virtually stop runoff with its dense stand of grass blades and extensive root system. The correct use of lawn fertilizer plays an important role in developing a healthy turf. Cultural practices and pest control can also influence the quality of the lawn and the potential for runoff.

There are over 5 million lawns in the Chesapeake Bay watershed, each with a chance to be part of the problem, or part of the solution, in holding down non-point pollution.

With spring time fast approaching, local store shelves are full of fertilizer and pest control products. Many of these are excellent products that can be very useful in developing a healthy turf. As long as these products remain on the lawn where they can 'do their thing', they pose little risk. When used improperly, they have the chance to move off site and become a part of the pollution problem.

Common mistakes made by many homeowners include fertilizing too often, using more product than necessary, applying at the wrong time of year, and sloppy applications that leave fertilizer and pesticide granules on driveways, sidewalks, and roadsides.

Most lawns in Northern Virginia contain cool season grasses such as tall fescue and bluegrass. These lawns make most of their growth in spring and fall and hold some color throughout the year. They are best fertilized in the fall when the nutrients are used to develop a strong root system that will provide a nice green-up the following spring.

There are some warm season lawns in the region that contain Bermuda or Zoysia grass. These grasses thrive in warm weather and should be fertilized in spring and early summer. They go completely dormant in the fall.

A good starting point for any lawn fertilization program is a soil test. They are available through Virginia Cooperative Extension. Soil test results provide recommendations for fertilizer and lime applications.

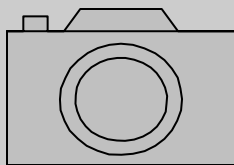
The backbone of most lawn fertilization programs are 'turf-type' fertilizers that contain a high percentage of nitrogen, and lesser amounts of phosphorus and potash. The standard recommendation is to apply fertilizer based on the nitrogen content, so that one pound of actual nitrogen is applied per one thousand square feet of turf. It is quite common in lawn care literature to see complicated

*(Continued on page 3)*

## Be A Litterbug Shutterbug

### *Photo Contest*

**What**—Take photos of unsightly litter spots in Fauquier County, such as old tire piles, illegal dump areas, and trash in streams.



**Why**—Winning photo spots will be targeted for Fall clean-up efforts.

**When**—Contest begins April 19 and runs thru May 6

**Prizes**—1st, 2nd, & 3rd place—Neat Stuff

Sponsored by Fauquier Environmental Services and McClanahan Camera

Call Deb or Paula at 347-6811 (Environmental Services) for complete rules and criteria

## Meet JMSWCD Employee **Debbie Switzer**

**Debbie Switzer** is the most recent addition to the JMSWCD staff. She was hired as an Erosion and Sediment Control Specialist and is responsible for assisting with the implementation of the County E&S Control Program. Debbie has recently attended the DCR training courses and has received her Erosion and Sediment Control Combined-Administrator Certification.

Debbie graduated from Ferrum College with a B.S. degree in Environmental Science. Throughout her career, Debbie has worked for VDOT preparing environmental documents and obtaining water quality permits, worked for a consulting firm delineating wetlands, and worked part-time for the Culpeper County School System.

Debbie lives in Richardsville with her husband, two children, and two dogs. She enjoys walking her dogs, gardening, and making wagon wheel weavings.



**Debbie Switzer**  
E & S Specialist

## Teacher's Corner

- In conjunction with "Soil and Water Stewardship Week", April 25-May 2, 2004, the JMSWCD is sponsoring a **poster contest** for **4th grade students**. The theme for Stewardship Week and for the poster contest is "**The Living Soil**". Fourth Grade teachers should have received information, if not, call Chuck at 347-3120, ext. 3.
- Will your class study **soils, watersheds, water pollution** or similar topics this spring? The JMSWCD has a variety of classroom programs and activities to supplement your conservation education curriculum, including an EnviroScope model, to help meet appropriate SOLs. To find out more, call 347-3120, ext. 3, and ask for Chuck.

### • Interesting Websites for Teachers:

The National Environmental Education & Training Foundation (NEETF) has launched [www.ClassroomEarth.org](http://www.ClassroomEarth.org). It is a free Web site with key information on how educators can obtain the best and most usable environmental education programs available today.

The EPA's Environmental Kids Club at [www.epa.gov/kids](http://www.epa.gov/kids) full is of games, pictures, stories and other fun activities for students of all ages and teachers.

## EVENT CALENDAR

- |           |   |
|-----------|---|
| Apr.-Oct. | <b>Master Gardener Horticulture Hotline</b> -Call the Fauquier County Master Gardeners with all your gardening questions. 540-341-7950 x 19   |
| Apr. 24   | <b>Prince William Garden Expo</b> (formerly Spring Fling), Prince William County Fairgrounds, 9am-3pm. Admission Free, Contact Paige Thacker 703-792-7747, email <a href="mailto:thacker@vt.edu">thacker@vt.edu</a>   |
| Apr. 29   | <b>Northern Virginia Area Horse Conference</b> - Middleburg, Contact Keith Dickinson 540-341-7950, x 12 email <a href="mailto:keithd@vt.edu">keithd@vt.edu</a>  |
| May 18-19 | <b>'Getting Started in the Greenhouse Business'</b> , Lord Fairfax Community College, Warrenton. This two day course is for anyone interested in learning the basis techniques of production and propagation required to operate a greenhouse business. For more information, contact Joyce Latimer, Extension Specialist, Greenhouse Crops at 540-231-7906: email <a href="mailto:jlatime@vt.edu">jlatime@vt.edu</a> |
| May 22    | <b>3rd Annual Piedmont Small Farm Festival</b> , Archwood Green Barns, The Plains. Contact Ray Pickering, 540-349-5314  |

mathematical equations for delivering the magical one pound of nitrogen with different formulas of fertilizer. Fortunately, most manufacturers of 'turf-type' fertilizers sell their products in bags designed to treat predetermined areas. It is more important for homeowners to know the size of their yard in square feet than it is to be a mathematician.

Most chemical lawn fertilizers are sold in 15-20 pound bags designed to treat 5 thousand square feet. Many organic lawn fertilizers are sold in similar size bags, but usually only treat 1-2 thousand square feet. All of these products come with directions for most popular fertilizer spreaders and will deliver the magical one pound of nitrogen if used as directed.

Proper fertilization is only one part of a healthy turf program. Mowing and pest control all play a part. Cool season grasses should be cut at 2 1/2 to 3 inches. Mowing shorter reduces root growth and stresses the lawn. Never cut more than 1/3 of the grass blade. This means that if the mower is set for 2 1/2 inches, the lawn should be cut before it reaches 4 inches. This is not easy to do in the spring, and may mean mowing on a 4-5 day interval for a few weeks.

Lawn clippings should not be bagged unless they are going to be used for compost or mulch. Leaving clippings on the lawn recycles nutrients and reduces the amount of fertilizer needed. Leaving the clippings for the whole season can be the equivalent of one fertilizer application. Research shows that clippings do not contribute significantly to thatch. There are many types of mulching mowers that cut the clippings very small so they decompose very quickly. A regular side discharge mower also works well. If no more than 1/3 of the grass blade is cut, the clippings will barely be visible.

Weeds and insects can cause occasional problems in any lawn, but more and more people are learning to accept a few weeds or bugs. Spot treating problem areas instead of treating the whole lawn can significantly reduce the amount of pesticides used. Homeowner pesticide products are often sold in small Ready-To-Use containers which are ideal for spot treatments.

It is still a common practice for fertilizer manufacturers and lawn care companies to promote '4-step' programs that apply the bulk of the fertilizer in spring and summer to cool season lawns. In addition to applying fertilizer at less than optimum times, many of these applications include routine use of insecticides and herbicides without any scouting to determine if they are needed.

Homeowners who have been fertilizing 3-4 times a year may find that one or two applications combined with leaving the grass clippings may provide acceptable results. Having an attractive, green lawn is nothing to feel guilty about. With judicious fertilizer use and proper cultural practices, almost anyone can have a lawn that is both green in color and green for the environment. The following websites contain more detailed information on proper lawn care and fertilization.....

Tips On Keeping Your Lawn Green -

<http://www.dcr.state.va.us/sw/docs/lawntips.pdf>

Mowing to Recycle Grass Clippings -

<http://www.ext.vt.edu/pubs/turf/430-402/430-402.pdf>

Lawn Fertilization in Virginia -

<http://www.ext.vt.edu/pubs/turf/430-011/430-011.pdf>

## Lawn Alternative Tips

Many homeowners try all the recommended lawn care practices and still have spots that just will not grow grass. In these cases, it may be better to grow something else. Groundcovers, mulch, and flowers can provide an attractive alternative while reducing the area that has to be mowed and fertilized on a regular basis. Consider the following to reduce the amount of lawn.....

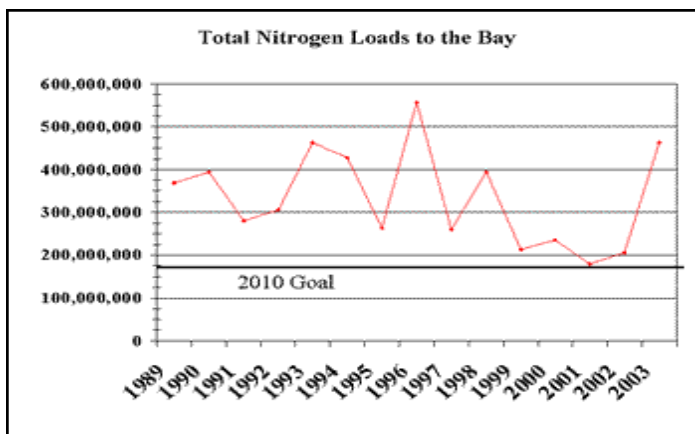
- Instead of mowing around individual trees and shrubs, tie them together into an island with mulch and plant additional shrubs, groundcovers, or flowers. It's easier to mow around one or two large islands than 10-12 individual trees. It is also better for the trees.
- Turn those odd corners and angles into smooth bordered beds with shrubs, groundcovers, and flowers. Reducing the lawn by 25% can save 50% of mowing time by eliminating those hard to mow nooks and crannies.
- Have a shady area invaded by moss? Pull up the grass and develop a moss garden.
- Have a sun-baked bank with soil like concrete? Develop a rock garden with drought tolerant plants.
- Use wood chips, decorative gravel, or stepping stones to make paths to tie together all the new garden spots.
- Native plants are all the rage these days. Many are very attractive and deserve a place in the landscape. However, they still need to be carefully selected for their location. Plant sun loving natives in the sun, shade loving natives in the shade, etc. Don't think that just because a plant is native to Virginia that it will grow anywhere!

## Bay Dead Zone 2003

Many of the conservation practices promoted by the John Marshall Soil and Water Conservation District are designed to reduce nutrient runoff from agricultural lands and protect water quality in ponds, streams, and rivers that eventually flow into the Chesapeake Bay. Nitrogen is considered the most significant pollutant of the Bay, and comes from crop lands, sewage treatment plants, urban runoff, suburban lawns, and even air pollution.

In the summer of 2003, the Chesapeake Bay recorded its largest 'dead zone' in 20 years. The 'dead zone' is an area with little or no dissolved oxygen that cannot support aquatic life. Last summer, the zone stretched for over 100 miles, from Baltimore to the mouth of the York River. The dead zone is caused by nutrients that enter the bay and stimulate blooms of algae that block sunlight to underwater plants and remove oxygen from water.

It has been speculated that nutrient levels in the Bay may be influenced by rainfall. Recent data based on actual nitrogen measurements (rather than computer models), shows this to be true. Since 1989, the two years with the highest nitrogen levels have been 1996 and 2003, both very wet years. In 2001, a year of severe drought, nitrogen levels were much lower, water clarity improved, and underwater grasses started to rebound.



The data suggests that nutrients that are not utilized can lie around on fields, lawns, and roadways for some time waiting for a rain event to move them off site. This underscores the importance of continued efforts to reduce nutrient sources, and to promote increases of forested areas, wetlands, riparian buffers, and conservation practices that will help keep nutrients on the land where they can be absorbed by crops, grasses, trees and shrubs.

## George Sutton Retires



After a career spanning over 30 years, including the last twelve in Fauquier, George Sutton has retired from

NRCS. George was a fixture in the local agricultural community, and worked with many farmers and land-owners in developing sound conservation practices. Anyone who has worked with George in the past can still call the JMSWCD for assistance. While his position has not been filled yet, personnel from adjoining areas are helping out on a regular basis.

## Holiday Lake Forestry Camp

For over 50 years, **Holiday Lake Forestry Camp** has introduced young Virginians to the challenges, special skills and knowledge needed for managing forest resources which are used and enjoyed every day. The camp is designed for students who want to: explore and experience activities in forestry and wildlife related careers; participate in forestry and wildlife judging teams, Envirothon competitions or ecology clubs; and, have a special interest in *hands on* learning about natural resources. Classes are taught by professional foresters, wildlife biologists and conservation resource specialists. Located within the 20,000 acre Appomattox-Buckingham State Forest, the Camp is held at the Holiday Lake 4-H Education Center from June 14-19. The John Marshall SWCD sponsors **two** students to attend this camp each year. The registration deadline is April 19. Call the JMSWCD office at 347-3120, ext. 3, for more details.

## Youth Conservation Camp

Each year the JMSWCD sponsors two students, grades 9-12, to **Youth Conservation Camp** held at Virginia Tech in Blacksburg. The camp explores a wide variety of natural resources topics including forestry and wildlife, fisheries, watershed management, pollution issues and agricultural best management practices. There are plenty of outdoor, hands-on training activities with highly skilled professional instructors. The date for the camp is July 11-17 and applications must be into the JMSWCD office by May 1. If you are interested, please call 347-3120, ext. 3, for further information.



# Native Plant Resources

The use of native plants is on the rise across the country as more people discover their many benefits. An ever-widening selection of vigorous, nursery-propagated native plants is available from specialty growers and many larger nurseries as a result of this increased demand. This offers a much-needed alternative to wild collection or the purchase of wild-collected plants. Wild-collection threatens the existence of native species by causing net losses in population size and genetic diversity, and leaves the collector or purchaser with highly stressed plants that have a decreased likelihood of survival. These problems are multiplied when the plants are collected from a distant source population, then planted in a new location with different environmental conditions.

The Department of Conservation and Recreation, in conjunction with the Virginia Native Plant Society and several other cooperating organizations, has developed some great reference materials to help people select appropriate native plants for various uses. Several lists have been developed based on cultural requirements, as well as geographical location in the state. This article is based in information contained in DCR's website.

Land managers, conservation professionals, restoration specialists, landscape designers, and private individuals are encouraged to utilize local growers and nurseries that offer nursery-propagated native species, especially plants propagated from local populations. Once a good source of native plants has been located, the next step is choosing appropriate plants for a project. One of the greatest benefits of designing with native plants is their adaptation to local conditions. But it is important to select plants with growth requirements that best match the conditions in the area to be planted.

When planning projects utilizing native plant species, the DCR lists can be used for information on which plants grow in each of the three major regions of Virginia. These three regions include the Coastal Plain, the Piedmont, and the Mountains. Light and moisture requirements for each species are included. Recommended uses include wildlife benefits, horticulture and landscaping, conservation and restoration, or domestic livestock forage. Of course, many of these species are well suited to more than one of these categories.

The DCR native plant lists can be accessed online at <http://www.dcr.state.va.us/dnh/native.htm>. There are separate lists for trees, shrubs, ferns/grasses/vines, herbs, and riparian buffer plants. Since the use of native plants is still relatively new, many people will find themselves unfamiliar with many of the listed plants. The Virginia Native Plant Society is a good source of information. Their website at <http://www.vnps.org/index.htm> has information on plants, plant sources, and meetings and events of interest to native plant enthusiasts. The Native Plant Society is headquartered at the Blandy Farm in Boyce, and has active chapters throughout Virginia.

***The Conservation Strip*** is a quarterly publication of the **JOHN MARSHALL SOIL AND WATER CONSERVATION DISTRICT**, 98 Alexandria Pike, Suite 31, Warrenton, VA 20186

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**Volume 22, No. 4**

# EQIP Offers Cost Share for Farmers

Virginia Farmers can begin signing up for the Environmental Quality Incentives Program (EQIP). EQIP is a voluntary program administered by the Natural Resources Conservation Service (NRCS) to help farmers address environmental concerns related to various agricultural enterprises.

Virginia will receive \$9.8 million this year for EQIP, a 25% increase over last year's funding. Equip funds can be used to cost-share practices such as animal waste management, stream crossings, livestock troughs, controlled grazing systems, erosion control practices, forestry stabilization, and nutrient management practices. Two new concerns this year are irrigation water conservation and poultry litter transfer.

Farmers who sign up for 2-10 year contracts under EQIP, can receive cost-sharing and incentive payments for conservation practices called for in their respective conservation plan. Payments vary between 35%-75% depending on the practice to be installed. Most are at the 50% rate.

To be eligible for the program, individuals must be engaged in livestock or agricultural production. All programs are offered on a nondiscriminatory basis.

To apply for EQIP, visit your local USDA Service Center to sign-up. A conservationist will visit each applicant's farm to evaluate and rank the application based on environmental benefits. The application will then be ranked against other applications from across the state. Applications receiving the highest environmental benefit score are approved for funding.

For more information, contact Barry Harris thru the JMSWCD at 540-347-3120, ext. 3.



Stream crossings are just one of many practices eligible for EQIP funds.

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